

REMARKS

In accordance with the foregoing, claims 1 and 8-14 have been amended and claim 15 has been added. Claims 1-15 are pending and under consideration.

DRAWING ACKNOWLEDGEMENT

No indication of the status of the drawings was provided in item 10 of the Office Action Summary. Please acknowledge the acceptability of the Drawings (Figs. 1-18) in the next Office Action.

REJECTION UNDER 35 U.S.C. §112:

In the Office Action, at pages 2-3, claims 8-11 were rejected under 35 U.S.C. §112, second paragraph, for the reasons set forth therein. This rejection is traversed and reconsideration is requested.

Claim 8 has been amended to recite that " β is a ratio of the threshold to the standard value, and γ is a ratio of a number of overloaded cases to a total number of cases." Claim 9 has also been amended to recite that " β is a ratio of the threshold to the standard value." Thus, Applicants respectfully submit that claims 8 and 9, in their amended form, provide sufficient antecedent basis for the parameters β and γ .

Claim 10 has been amended to clarify that the "connection response" noted by the Examiner in item 6 of the Office Action is "a connection request from a client and a response from a server in response to the connection request" and the "response" is "a response occurring after establishing a connection between a server and a client." In light of the amendments to claim 10, Applicants respectfully submit that the relationship between the "connection response" and "response" has been clarified.

Claim 11 has been amended to recite that " the permissions of each of the servers are taken as weighted values of a service distribution, or relative ratios of the permissions are taken as server distribution ratios." Thus, Applicants respectfully submit that claim 11 has been amended to overcome the Examiner's rejection.

REJECTION UNDER 35 U.S.C. §102(b):

In the Office Action, at pages 3-7, claims 1, 2, 6, 7, 12, and 14 were rejected under 35 U.S.C. §102(b) in view of U.S. Patent No. 5,341,477 to Pitkin et al. This rejection is traversed and reconsideration is requested.

The present invention teaches a system for load distribution between network servers using a simulation of the servers to predict load. The simulation of the servers is created using server logs and service logs that include information about captured packets transmitted to and received from the servers. Using the server logs and service logs, the simulation can accurately predict whether a server is overloaded or not, and distribute client requests among the servers appropriately.

U.S. Patent No. 5,341,477 to Pitkin et al., in contrast, discusses only a "broker mechanism" that allocates servers based on network policies and local policies for each of the servers. The "modeling" of Pitkin et al. is based only on a customer's input of desired service (see Pitkin et al. at col. 5, lines 22-25) and predetermined server resources unrelated to captured network packets. Neither the customer's input nor the resources of the server are based on the information of captured network packets stored in a log as, for example, in amended independent claim 1. Rather, Pitkin et al. discusses only server parameters determined in advance before the network is even implemented (see Pitkin et al., col. 5, lines 5-7). Because the modeling of Pitkin et al. occurs prior to the implementation of a network and before any packets can be captured or logged, Pitkin et al. does not teach or suggest "setting up a simulation model for each server from the server log" or "a service modeling module setting up a simulation model for each service from the service log" in which the logs include "information pertaining to the captured packets," as in amended independent claim 1. For at least these reasons, Pitkin et al. also fails to teach or suggest "generating a simulation model for each server and a service modeling module generating a simulation model for each service based on a server log and a service log of captured server communication," as recited in amended independent claim 12, or "generating a simulation model for each server and each service based on a server log and a service log of captured server communication," as recited in amended independent claims 13 and 14. Thus, Applicants respectfully submit that independent claims 1, 12, 13, and 14, in their amended forms, are patentable over the prior art for at least the reasons discussed above.

Applicants respectfully submit that dependent claims 2, 6, and 7, which depend directly or indirectly from independent claim 1 discussed above, are also patentable over the prior art for at least the reasons discussed above.

REJECTION UNDER 35 U.S.C. §103(a):

In the Office Action, at page 8, claim 3 was rejected under 35 U.S.C. §103(a) as being unpatentable over Pitkin et al. in view of Microsoft Press Computer User's Dictionary ("Microsoft") and further in view of U.S. Patent No. 6,314,463 to Abbot et al., claim 4 was rejected as being unpatentable over Pitkin et al. in view of The Art of Computer Systems Performance Analysis (Jain) and further in view of "On the Modeling and Analysis of Computer Networks" (Kleinrock), and claim 5 was rejected as being unpatentable over Pitkin et al. in view of Kleinrock. The reasons for these rejections are set forth in the Office Action and therefore not repeated. The rejection is traversed and reconsideration is requested.

Claims 3, 4, and 5 each depend directly from claim 1 which, for at least the reasons discussed above, Applicants believe to patentably distinguish over Pitkin et al. Moreover, Applicants respectfully submit that Microsoft, Abbot et al., Jain, and Kleinrock also fail to teach or suggest the features of amended independent claim 1. Accordingly, Applicants respectfully submit that claims 3, 4, and 5 are also patentably distinguishable over Pitkin et al., Microsoft, Abbott et al., Jain, and Kleinrock.

NEW CLAIM:

New independent claim 15 is added to set forth the invention in a varying scope. Accordingly, Applicants respectfully submit that new independent claim 15 is patentable over the Examiner's cited references.

CONCLUSION:

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

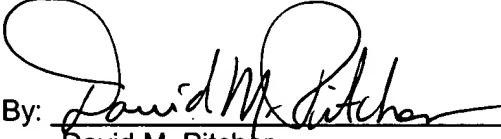
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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